

**A GENITALIC ABERRATION OF  
TRAPEZITES PRAXEDES (HESPERIIDAE: TRAPEZITINAE)  
FROM NEW SOUTH WALES**

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### **Abstract**

A male specimen of the Australian endemic skipper *Trapezites praxedes* (Plötz) collected from the Barrington Range, central-eastern New South Wales, shows remarkable morphological differences in the genitalia. The entire structure is 'stretched' to a narrow, elongate form, although in detail each component is present and unaltered in proportion when compared with the genitalia of typical male specimens from nearby coastal localities. The comparative male genitalia are illustrated.

### **Introduction**

The known distribution of *Trapezites praxedes* (Plötz) (see Sands *et al.* 1984) is eastern Victoria, coastal and montane New South Wales (Common and Waterhouse 1981), a few occurrences in southern Queensland and an unconfirmed, isolated record from central Queensland (Dunn and Dunn 1991).

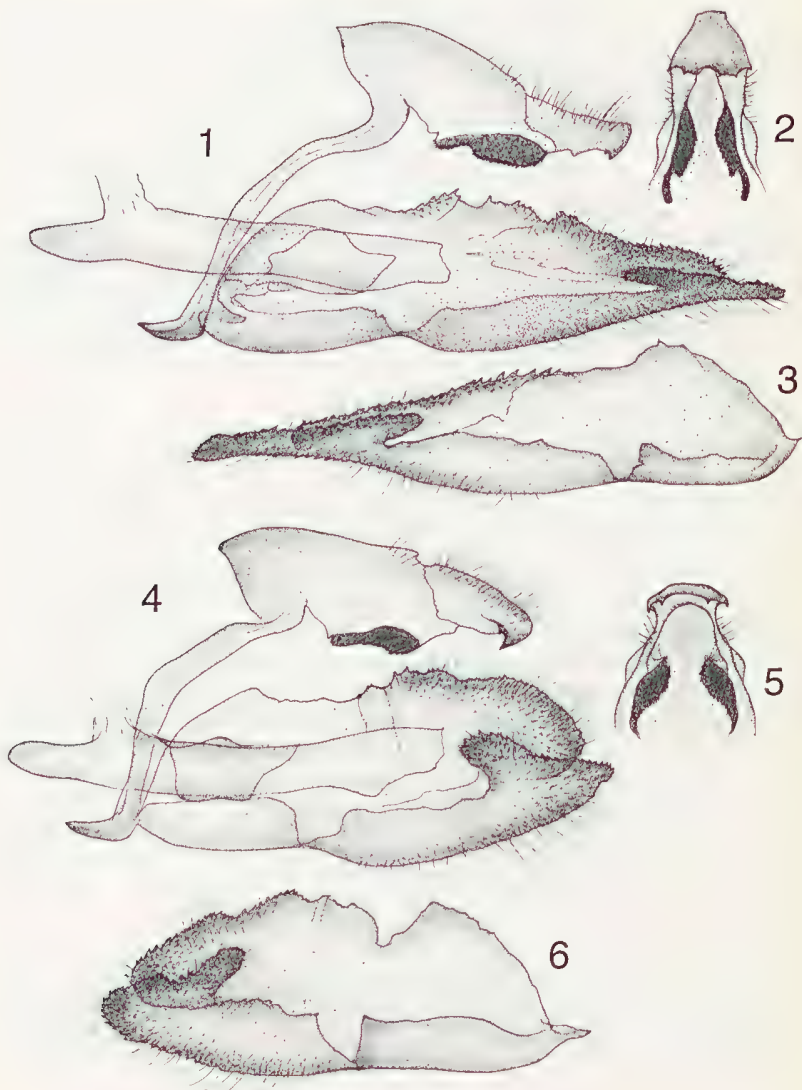
*Trapezites praxedes* is currently under taxonomic review by one of us (AA). The holotype is from the Sydney area ('Port Jackson') (Waterhouse 1932). Specimens very similar to the type occur along the coastal and near-coastal fringe of New South Wales, north to at least Port Macquarie (R. Mayo, pers. comm.) and in Queensland as far north as Fraser Island (pers. obs.). Another form, possibly a distinct taxon, is found in montane areas north from the Barrington district to at least southern Queensland (unpubl. data).

The recent capture of a male similar to the typical form, in the Barrington Range, is thus significant. The slightly worn specimen (now in the Australian Museum, Sydney) was collected on 24.iii.1991 at 'Tuglo' near Mt Royal, by A.S. Smithers. Dissection of the genitalia showed, however, that the structure was unlike that of any known trapezitine species.

### **Genitalia**

All the components of the genitalia are present (Figs 1-3) and can be compared with those of the typical form (Figs 4-6), but the general structure, particularly the distal section, appears drawn out or stretched in an almost 'plastic' way.

Combined tegumen and uncus shorter than valva, laterally narrow and posteriorly elongate, curved downward but slightly upward at uncus which is rounded and blunt, slightly raised lateral flanges; vinculum normal, beak shaped; valvae somewhat asymmetrical (right valva narrower), shaped as in that of typical form, but narrow and elongate, tapered at posterior end with lower section (harpe) extending beyond upper to a pointed sclerotized



**Figs 1-6.** Male genitalia of *Trapezites praxedes*. (1-3) Aberration from Tuglo, N.S.W.: (1) lateral view of inside right valva, aedeagus and uncus; (2) ventral view of uncus tip; (3) lateral view of inside left valva. (4-6) Typical form from Whitebridge, N.S.W.: (4) lateral view of inside right valva, aedeagus and uncus; (5) ventral view of uncus tip; (6) lateral view of inside left valva.

projection, a recurved flattened process on inner edge; aedeagus as in typical form but tapered posteriorly.

### Discussion

*Trapezites praxedes* varies marginally throughout a range of biomes along the central coast of New South Wales. The skipper most frequently occurs in open, mixed woodlands with a heavy heath understory, from sea-level to 500 m, in areas where the larval foodplant *Lomandra* Labill. (especially *L. obliqua* [Thumb.]) is abundant (Atkins 1993). The locality at Mt Royal contains a mixed variety of forest types, especially wet sclerophyll and rainforest. The aberrant male specimen was collected at approximately 700 m, beyond the normal altitude of this form, but may have originated from sclerophyll woodlands on the lower foothills. To our knowledge, this is the first record of the typical coastal form from the Barrington area.

Only one other aberration of *T. praxedes* is known. In December 1967, A. Sibatani collected an unusual male specimen near Coffs Harbour, northern New South Wales, in which both upper and lower wing surfaces had broadly exaggerated maculations (Sibatani 1970). Sibatani stated "Its antennae, head (palpi missing), body, wing shape and genitalia (dissected) are similar to those of *Trapezites maheta praxedes* (Plötz)." It is interesting that both aberration and a comparative male specimen (collected in December 1968 at the same locality, Coffs Harbour), illustrated by Sibatani (1970), are in fact atypical of the coastal form of this species. Conversely, the Mt Royal aberration, in appearance, closely resembles male coastal specimens from the Hunter Valley district.

### Acknowledgments

We thank Mr Ted Edwards, CSIRO, for alerting us to A. Sibatani's paper and for discussion. Our thanks also to Mr Michael Braby, Mr Rod Eastwood, Mr Russel Mayo and Dr Grant Miller for discussions on *T. praxedes* and to Dr David McAlpine of the Australian Museum, Sydney, for the loan of specimens.

### References

- ATKINS, A. 1993. Biological, behavioural, and distributional records of some butterflies from New South Wales. *Victorian Entomologist* 23: 54-56.
- COMMON, I.F.B. and WATERHOUSE, D.F. 1981. *Butterflies of Australia*. Revised Edition. Angus & Robertson, Sydney.
- DUNN, K.L. and DUNN, L.E. 1991. *Review of Australian Butterflies: distribution, life history and taxonomy*. Privately published, Melbourne.
- SANDS, D.P.A., MILLER, C.G., KERR, J.F.R. and ATKINS, A.F. 1984. The specific status of *Trapezites praxedes* (Plotz) (Lepidoptera: Hesperidae): previously considered to be a subspecies of *T. maheta* (Hewitson). *Australian Entomological Magazine* 11: 27-33.
- SIBATANI, A. 1970. An aberrant form of *Trapezites maheta praxedes* (Plotz) (Lepidoptera: Hesperidae) from New South Wales. *Journal of the Australian Entomological Society* 9: 67-68.
- WATERHOUSE, G.A. 1932. Australian Hesperidae. II. Notes and descriptions of new forms. *Proceedings of the Linnean Society of New South Wales* 57: 218-238.

## Erratum

Atkins, A. 1994. A new genus *Herimosa* (Lepidoptera: Hesperiiidae: Trapezitinae) and its relationship to the *Proeidos* group of endemic Australian skippers. *Australian Entomologist* 21: 143-152.

In paragraph 2, page 148, 'The adult males of three species of *Anisynta* (*A. sphenosema*, *A. cynone* and *A. tillyardi* ) and *Antipodia* have a sex-brand (or stigma) on the upperside of the forewing' should read 'The adult males of two species of *Anisynta* (*A. dominula* and *A. monticola* ) and *Antipodia* have a sex-brand..'